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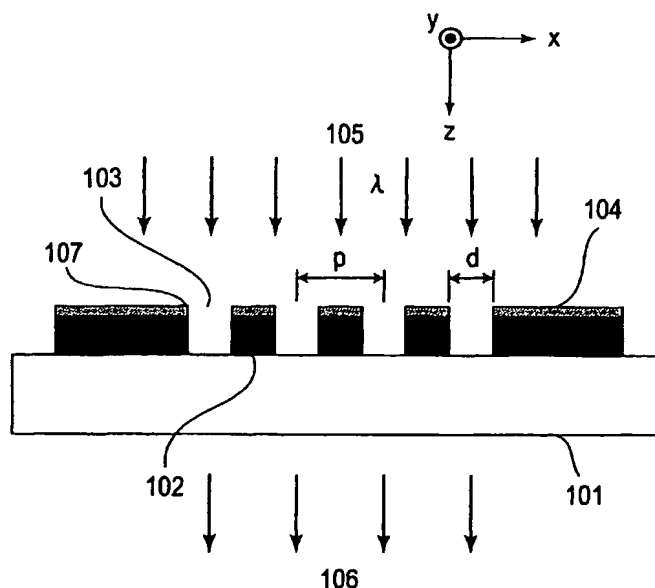
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[Continued on next page]

(54) Title: **CHEMICAL SENSOR AND CHEMICAL SENSOR APPARATUS**



(57) Abstract: A chemical sensor for detecting a reaction of a sensor material with a specimen on the basis of an intensity of a surface plasmon polariton wave propagated along a surface of a sensor medium including the sensor material is principally constituted by the sensor medium. The sensor medium includes a periodic structure and the sensor material disposed on the periodic structure. The periodic structure has a pitch substantially equal to an integral multiple of a wavelength of the surface plasma polariton wave generated by irradiating an interface between the periodic structure and the sensor material with light.



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INTERNATIONAL SEARCH REPORT

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B. FIELDS SEARCHED

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 2002/021445 A1 (BOZHEVOLNYI SERGEY ET AL) 21 February 2002 (2002-02-21) figure 2 ----- -/--	1-22

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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